

## CLAIMS

1. An infrared modulator for spectrometer, comprising  
a light source;  
a beam splitter for splitting the light from the source into two beams;  
a first plane mirror for directing the light of the first beam;  
a second plane mirror for directing the light of the second beam,  
a first cube corner mirror formed of three mirrors perpendicular to each other for turning the light directed by the first plane mirror back to the first plane mirror;  
a second cube corner mirror formed of three mirrors perpendicular to each other for turning the light directed by the second plane mirror back to the second plane mirror, the first and second cube corner mirrors being arranged on a common optic axis to reflect into opposite directions and movable back and forth in the direction of said optic axis; and  
a support structure formed by one uniform material piece for supporting the beam splitter and the first and second plane mirrors.
2. An infrared modulator as claimed in claim 1, wherein the support structure is symmetrical such that the beam splitter is on its symmetry axis and the first and second plane mirrors are symmetrically on different sides of the beam splitter equidistant from it.
3. An infrared modulator as claimed in claim 1 or 2, wherein the support structure is provided with only in one limited area for fastening the support structure to a mounting platform.
4. An infrared modulator as claimed in claim 3, wherein said one limited area for fastening the support structure to a mounting platform is at the beam splitter.
5. An infrared modulator as claimed in claim 1, wherein the support structure is made of a homogenous and massive material, such as brass.